HOME CULTURES VOLUME 4, ISSUE 3 PP 213–236

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PESTS AND HOME-MAKING: DEPICTIONS OF PESTS IN HOMEMAKER MAGAZINES

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ABSTRACT Despite their ubiquity and significant impact within the house-as-home, pests have largely been absent from discussions of home-making. This article addresses this absence by drawing on depictions of pests in four popular Australian homemaker magazines—*Australian Women's Weekly, Australian House & Garden* and *Australian Home Beautiful* in the periods 1951–5, 1971–5, and 2001–5, as well as *Better Homes & Gardens* 2001–5. In a first analysis of this material, pests appear as nonhuman animals that disrupt people's experiences of home. Border narratives that depict home as an inappropriate abode for pests

DOI 10.2752/174063107X247233

are significant in these discussions. However, an alternate view of pests emerges through further analysis. In this view, pests become part of home and shape human experiences of the space. Home appears here as an active and dynamic space that is lived in multiple and fractured ways that exceed its intentioned human design. This view acknowledges the more-than-human dimensions of home-making, pointing to home as an imbrication of human and nonhuman actors, including pests, home furnishings, and house structures.

KEYWORDS: Pests, Home-making, Nonhuman agency, Borders, Homemaker magazines

INTRODUCTION

> Arriving in Sydney in 1806 Sal and William Thornhill, protagonists in Australian author Kate Grenville's novel *The Secret River*, encountered an array of animals living within their home:

> Their hut swarmed with creatures they had never seen before: bold lizards that eyed them unblinkingly, sticky black flies, lines of ants that could reduce a lump of sugar to nothing in a night, mosquitoes that could sting through cloth, creatures along the lines of a bedbug that carried their heads in skin and swelled with human blood. Sal learned from their neighbours how to deal with them, setting the legs of the table in dishes of water against the ants, hanging switches of pungent leaves at the doorway to discourage the flies. Against the blood-suckers and the nits she cut the children's hair (Grenville 2005: 87–8).

Sal quickly learnt to deal with these "invaders" through changes to the house and her housekeeping practices. But despite these efforts the home was never definitively secure. A cricket that sat, croaking, behind the stairwell at night contributed to a feeling that this house was not quite the home that Sal and William had imagined.

While it is the unfamiliarity of these encounters that brings them to the fore of the Thornhill's experience in their new home, these engagements also speak to more everyday encounters taking place within contemporary homes. Animals, like those encountered above, are found throughout home spaces and are commonly viewed as pests. They might be flies entering through doors left open in

summer, fleas clinging to the back of the dog, cockroaches scuttling through the kitchen after dark, or dust mites in the curtain that has not yet been washed. But, despite their ubiquity, these creatures are typically left out of academic and popular discussions of home. In this article I begin to address this lacuna through an engagement with depictions of home-making in four popular Australian home magazines (*Australian Women's Weekly, Australian House & Garden, Australian Home Beautiful* and *Better Homes & Gardens*). Focusing on contemporary Australian homes, in the period 1950–2005, I focus on creatures typically elided as pests to consider some ways that nonhuman animals shape the experience of home-making.

The article starts by addressing the nature of pest presences, calling for an engagement with the specific character and agency of pests and an understanding of how these factors impact on the ways that pests are imagined in the home. Then, drawing on depictions of home-making in Australian home magazines, the article highlights some ways that pests have been imagined and their presence within the home space challenged. Through these examples, the view of the house-as-home begins to shift as human-oriented perspectives of this intimate space are expanded by an increased awareness of the diverse lives and activities that take place within its walls. This analysis extends previous engagements with the materiality of home by recognizing the specific agency of pests in the (un)making of home, and by acknowledging the complex and fractured ways through which home is lived.

PESTS IN THE HOME

Despite their ubiquity, pests have received little attention in discussions of home. Where they have appeared they have been largely subsumed within broader discussions of home risks, appearing in lists of potential home contaminants and receiving little independent discussion. For example, in Berner's (1998) analysis of late-nineteenth-century Swedish home-making guides, creatures like moths, roaches, flies, ants, and vermin are briefly listed alongside dust, servants, and "feminine nature" as forces deemed to represent a destructive threat to the home. Similarly Martens and Scott's (2005) discussion about the impact of germ theory on home-making practices in the late nineteenth century highlights pests in terms of germs and germ-related cleaning (see also Reiger 1985). However, while certain animals do act as germ vectors (pests are listed as one of the four main sources of germ-related infection in the domestic environment by microbiologists Beumer and Kusumaningrum 2003), the impacts that pests have within the home are not limited to this activity.

Indeed, it is more productive think about how pests are defined. "Pest" describes a diverse group of organisms united by their perceived capacity to disrupt and disturb people and things of

significance to them. Horsfield's (1997) journalistic discussion of cockroaches and burglars as house pests that challenge her sense of home ownership and belonging imaginatively captures this diversity. For Horsfield pest status is not a fixed position, but instead is influenced by the impact that animals have on human "health, comfort and aesthetics" (1997: 173). In other words, "pest" is a contingent identification that reflects animal presence, activity, and the ways that animals impact on humans. Kirkwood (1987) also depicts "pest" as a shifting identification. He discusses the potential for pets to become pests through their capacity to act in "troublesome" ways by biting, stinging, producing nuisance smells and sounds, and damaging property and ecosystems. Reflecting these views, this article promotes a broader engagement with pests that gives attention to their specific character and the ways that these factors see them imagined as pests within the home. In particular the article highlights the potentially "purposive, transformative and creative" agency (Jones and Cloke 2002: 7) of nonhuman animals that shapes and motivates a range of human activities, including pest identification and elimination. The "house pest" emerges from this definition not as a fixed position, but instead as a relational achievement that shifts according to the characteristics and activity of nonhumans and the priorities and cultures of their human co-residents. In this model the "placing" of human–animal encounters, in this case within the home, plays a significant role in pest identification, with the potential for particular organisms to be imagined as pests in some locations but not in others.

Figure 1 illustrates this relation. In this view pest is a multifaceted identification produced through the intersection of human and

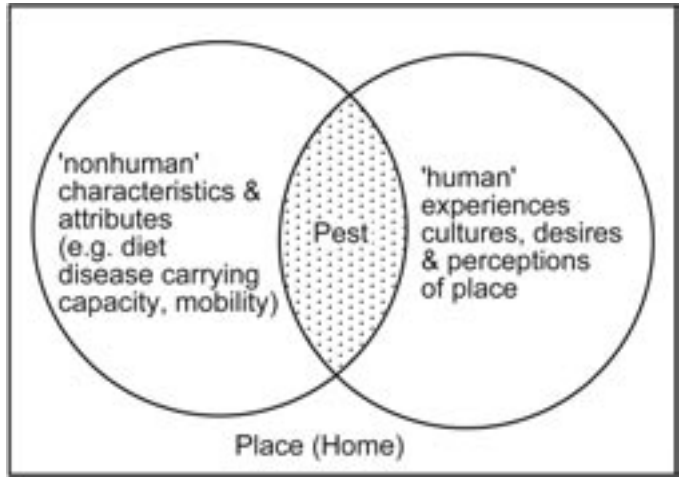

Figure 1
"Placing" human–animal encounters.

nonhuman interests and activities in a particular place. It references firstly an organism's particular agency and characteristics, such as the capacity to carry microorganisms that are harmful to people, dietary/living habits, and mobility characteristics. Secondly, it is applied by people in relation to their desires, cultures, and perceptions of place. Organisms that have an obvious or "material" impact on human experiences are thus readily identified as pests. For example, it is the bedbugs' inhabitation of the bedroom environment and the irritation caused by their bites that sees them engaged as pests. In the same way, the disease-carrying capacity of flies and mosquitoes has historically seen them identified as significant pests around the world. Dietary habits can also be an indicator of pest status, with organisms that consume items of significance or use to humans commonly identified in this way. The match between the timbers used in house construction and the dietary preferences of some termites species, for instance, causes these creatures to be recognized as pests in many locations (CSIRO 2005).

The location of human–animal encounters plays a key role in pest identification, with pests viewed as organisms that disrupt or rupture human perceptions or experiences of particular places. Within the house-as-home pests negotiate popular understandings of home as an autonomous, private, and secure space. This conceptual and material separation of home from the "outside," and home from "nature," is fundamental to contemporary Western home cultures, with bodies and practices that disrupt or challenge this sense of order and security commonly depicted as threats and eliminated from the home (Ger and Yenicioglu 2004; Kaika 2004; Pink 2004). As a relational category constructed on the basis of threat and disorder "pests" can thus also be identified as bodies out-of-place.

An additional component of pest identification surrounds the affective dimensions of human–animal encounters. In particular, a number of studies have pointed to the capacity of some animals to generate feelings of fear and disgust in humans who encounter them. For instance, creatures like beetles, wasps, bees, snails, mice, mosquitoes, and rats were identified as undesirable by participants in Bjerke and Østdahl's (2004) research, while Kellert (1993: 849) found that "most invertebrates, particularly insects and spiders" generated "aversion, dislike, or fear" responses in participants. Further, Kellert found that:

> A large majority of the general public indicated a dislike of ants, bugs, beetles, ticks, cockroaches, and crabs; an *aversion to insects in the home*; a fear of stinging insects, spiders, and scorpions; a desire to eliminate mosquitoes, cockroaches, fleas, moths, and spiders [...] (Kellert 1993: 849, emphasis added).

Arrindell (2000) also found that snakes, wasps, rats, maggots, cockroaches, and spiders rated as the most feared animals. Of particular relevance to this research is his observation that "dry or non-slimy invertebrates" and "slimy or wet looking animals," groupings, which incorporate common house pests such as the cockroach, were among the most disliked and feared animals (2000: 517–8). Bjerke and Østdahl (2004) point to the role of animal appearance and concerns about disease contraction in human responses to animals. Kellert (1993, see also Jones 2000) similarly surmises that it may be the bodily unfamiliarity and foreignness of these organisms, and invertebrates in particular, that sees them encountered in this way. However, there are variations in the ways that individuals identify and respond to pests (for example, Fox (2006) interviews people who keep snakes and rats as pets). In this model, as outlined in Figure 1, pest status references aspects of animal appearance and activity alongside human perceptions and experiences of nonhuman animals.

In these views the pest identity is not a fixed position, but instead circulates around the disturbance of people (e.g. through biting or being visibly "out-of-place") and things that are of significance to them (e.g. through consumption of the house frame). In this way when brought into the home, "pest" becomes a lens that illuminates the contributions that particular nonhumans make to the (un)making of home. Further, as it is applied in relation to human cultures and desires it additionally points to factors that underpin the ways that people experience particular places, such as the home (e.g. as a secure space). In this way, the pest identity facilitates a move away from traditional accounts that emphasize humans as the sole agents of home-making. Further, it highlights the contingency of home as a space that is never simply finished or secure and that can be challenged and destabilized in a variety of ways. The Thornhills' experiences, as introduced at the beginning of this article, resonate with this view. For Sal and her family pests were encountered as stinging, biting, visibly out-of-place creatures. Pests made the home less comfortable and, although much housework activity was introduced to deter their presence, the Thornhills were often left making home alongside an array of pestilent creatures. Rather than experiencing home as a necessarily human place, for Sal it was a much more labor-intensive and tenuous achievement.

As Figure 1 suggested, the "placing" of human–animal relations plays a significant role in pest designation. Located within the house-as-home these interactions occur alongside notions of home as a safe, secure space that is distinct from nature and the "outside" (see above). An initial view, therefore, suggests that pests would appear as organisms that challenge these values and disrupt human experiences of this space. However, while this is

certainly true, the article will additionally consider some ways that pests become part of the home and shape human experiences of home-making.

METHODOLOGY

The article explores depictions of pests and pest-related home-making activity in four popular Australian home-making magazines to consider how pests have been imagined and challenged within the home—*Australian Women's Weekly* (*AWW*), *Australian House & Garden* (*AH&G*), and *Australian Home Beautiful* (*AHB*) in the periods 1951–5, 1971–5 and 2001–5, as well as *Better Homes & Gardens* (*BH&G*) 2001–5. Within these time periods each edition of the monthly publications was reviewed (*AH&G*, *AHB*, *BH&G*, and *AWW* 2001–5).[1] In the periods 1951–5 and 1971–5, January–March and October–December editions of *AWW* were reviewed. The magazine was published weekly during this period. These summer editions were emphasized as they contained the majority of pest references. Pest control cultures/practices were not found to shift over these time periods, instead, as the article discusses, changes occurred in the types of pests emphasized and in the types of materials used to manage pests (e.g. shift away from DDT-based sprays).

Homemaker magazines have frequently been utilized to explore depictions of home-making (Blunt and Dowling 2006, see for example Berner 1998; Berry 2005; Johnson and Lloyd 2004; Martens and Scott 2005, 2006; Osgerby 2005); in particular, the magazines discussed in this article also appear in research concerned with the shifting subjectivity of Australian housewives (see Johnson and Lloyd 2004, Lloyd and Johnson 2004—*AWW*, *AHB*, and *AH&G*), changing house designs, and the cultural role of homemaker magazines (see Greig 1995—primarily *AH&G*, but also includes *AHB* and *AWW*). However, where previous research emphasizes the human dimensions of home-making, this article foregrounds the contributions made by nonhuman actors, in particular pests.

While some accounts of living with pests were available through reader advice columns the majority of pest appearances occurred in articles and advertisements promoting pest removal and pest-removal products. The material cannot therefore be read as a description of *how* people live with pests, but rather it draws attention to representations of pests and housekeeping, and opens up one way of beginning to think about how home and home-making are shaped by pest presences. While in many ways the magazines, and in particular the advertising content, seek to produce "grammars of living" through the promotion of particular types of activity and consumption (Flint 2003: 614), they are also reflective of home experiences. The reviewed articles and advertisements frequently

reference readers' own experiences of pests. For example, the ongoing success of products is linked to their ability to destroy pests. Unlike germ-related products, which are oriented towards an invisible enemy, it is particularly evident when the claims made by cockroach and fly-poisons, for instance, are not accurate. Further, as Martens and Scott (2006) note in relation to home-cleaning products, advertisements and articles typically sought to generate an element of anxiety surrounding pest presences. While this can be viewed as simply an advertising strategy it is significant that many of the pest-related claims appearing in these advertisements also appear within independent pest management publications (see, for example, Gerozisis and Hadlington 1995).

For this research, articles, advertisements, and reader advice columns that mentioned pests or pest-control products were considered and the material coded according to two primary themes. The first circulated around the "pest" identity, with material coded to reflect the ways that particular animals were described as pests and how these animals were shown to impact on the home and home-making. The second theme focused on pest-control practices, giving attention to how homemakers were instructed to manage, control, and remove pests, as well as what these methods suggest about the home and human–pest encounters in this space. Underpinned by an interest in the role of nonhuman agency in home-making each of these themes maintained a focus on interaction and practice, considering how pests and the home came into being through the intertwining of human and nonhuman actors in the home. This emphasis facilitated recognition of nonhuman agency, which emerged as diverse actors interacted and were changed through their relations with each other.

The research considered three time periods (1951–5, 1971–5, and 2001–5). Magazine selection reflects the historical and contemporary popularity of these titles in Australia.[2] *AH&G*, *AHB*, and *AWW* were all strongly established prior to 1951 when this research starts. While *AWW* has maintained a similar focus throughout this time period (although shifting from weekly to monthly publication), *AH&G* and *AHB* have moved away from functional home-building advice towards a focus on interior design and home furnishing (see Greig 1995 for discussion). *BH&G* was thus selected as an example of a popular, contemporary magazine that closely reflects the original content of these magazines through its distribution of more functional home advice. The magazines have predominantly emphasized suburban experiences of home, targeting a middle-class, female audience. Earlier editions of *AHB* and *AH&G* (1951–5) were additionally marketed towards men as home-builders. This focus reflects a postwar shortage of home-building materials that led many suburban residents to attempt DIY home construction.

CRAWLING, FLYING, AND DIGGING INTO THE HOUSE-AS-HOME

The remainder of this article examines representations of people and house pests. It is divided into three sections that represent the three dominant types of pest risk appearing in the magazines. The first section follows pests believed to carry dirt and disease into the home space. Flies and cockroaches were most frequently associated with this activity. The second section follows dust mites. This group also challenged the health of home-dwellers, however, unlike the first group, they were understood to reside within the home and emerge from activities and objects located in this space. The final section follows white ants, a group of pests that represent a distinct challenge to homeowners through their threat to consume the house-as-home. In each of these sections, I firstly consider how these pests are depicted as a threat to home and, secondly, draw attention to practices that are represented as central to the achievement of a pest-free home. When these activities are brought into discussions of home it is evident that home is never simply a human place. Instead, home appears as a place that is constructed and maintained through a range of often labor-intensive activities, and with the assistance of various nonhuman objects and materials. In a concluding section these views are brought together as I reflect on an alternate, more active, mobile and multi-layered view of home.

1. Dirt and disease: Flies and cockroaches

The first group of pests was thate charged with introducing dirt and disease into the home. Advertisements in 1951–5 pinpointed flies as the proprietors of this filth and sickness (as also discussed by Martens and Scott 2005, 2006); however, in 1971–5 and 2001–5 these distinctions were increasingly attributed to the cockroach. Concerns about flies and cockroaches were predominantly highlighted in advertising material. Border narratives played a significant role in pest identification and restriction in each period, with flies and cockroaches depicted as unfamiliar and foreign bodies whose daily activity ruptured home's essential separation from the "outside." These depictions resonate with previous literature highlighting the significance of border narratives in approaches to housework and home-making (e.g. Ger and Yenicioglu 2004; Kaika 2004; Pink 2004, see above), but are novel in their attention to the ways that home borders are lived, transgressed, and (re)made in relation to nonhuman bodies.

In 1951–5 flies were identified as organisms responsible for importing dirt and disease into the domestic space. As they flew into the house, landing on food, toys, and rubbish bins they were shown to threaten home's safety and security by contaminating food and making family members sick. Children were depicted as

especially vulnerable to fly-borne sickness (e.g. Cyclone Screenwire, *AWW*, January 20 1951: 25; January 27 1954: 48; KIX fly spray, *AWW*, December 16 1953: 46).[3] Advertisements often highlighted specific concerns about flies' disease-carrying capacity. An advert for AGCO Supascreens, for instance, observed that, "The filthy annoying fly can carry death to your dinner table. Shut him *out*—for if he enters, typhoid and polio may be riding with him" (*AWW*, December 23 1953: 32). A Cyclone Screenwire advert similarly called for readers to

> Stop that fly—he's dangerous . . .
>
> Every fly is a dirt-and-disease-laden menace. His favourite crawling places . . . outside your home . . . are loathsome. His hairy legs are efficient instruments for collecting and carrying filth and germs (*AWW*, February 24 1951: 56).

These advertisements linked flies with germs and disease. Flies were depicted entering the home from "outside" and therefore as contaminating the home by connecting it to spaces of disorder (e.g. garbage and manure heaps) beyond the house.

By 1971–5 and 2001–5 concerns about dirt and disease had shifted to the cockroach. Like flies, cockroaches were seen to enter the home from spaces "outside." They were shown to inhabit unhomely, decaying houses (e.g. "Renovation Reality," *AH&G*, August 2001: 58; "Small Fortune," *AHB*, March 2003: 110), as well as border zones in "normal" family homes. A 1972 advertisement for "Rentokil professional pest control," for example, saw "These repulsive scavengers [. . .] Frequenting sewers, drains and *anywhere* putrefying waste gathers [and] transport[ing] disease organisms to food storage areas" (*AH&G*, December 1972: 131, emphasis added). Similarly, a 2002 promotion for "Mortein home pest control products" observed that:

> The worst thing about cockroaches is that they can be everywhere. Even in the cleanest of kitchens. Nocturnal creatures, they scuttle about after dark feeding on anything from garbage to sewerage and even dead skin cell debris. ("Mortein," *AHB*, January 2001: 131).

As they entered the kitchen and food storage areas cockroaches contaminated and ruptured home by highlighting its connection to drains and sewerage, spaces of disorder and decay that, while essential to home-making, are imaginatively positioned "outside" the home (Kaika 2004). In traveling through these spaces cockroaches link inside with outside, challenging perceptions of home's autonomy and safety. Kaika (2004) has recognized similar disruptions to home emerging from malfunctions in these systems;

however, cockroaches performed disruption through their *everyday* activity, living, feeding, and reproducing within and across the home's borders. The consumption of human waste further proved their liminality, and affirmed efforts to limit their access to the home.

Visual cues emerged as significant indicators of pest status in each period as advertisements substantiated the undesirability of flies and cockroaches through reference to their appearance (see also Horsfield 1997; Bjerke and Ostdahl 2004 above). Advertisements in the earliest period were predominately textual, educating readers about the specific nature of pest risks. As Figure 2 shows these adverts were often extremely evocative and substantiated a sense of the flies' otherness by describing their "disgusting" bodies and practices. While the more recent advertisements were primarily visual, they carried a similar message. The minimal use of text coupled with a bright red background superimposed with illustrations of cockroaches, as used in Mortein promotions, is a notable example. The abhorrence and undesirability of cockroaches is assumed within these adverts. The depictions affirm that flies and cockroaches are foreign and out-of-place within the home by drawing on the feelings of disgust and fear that characterize human encounters with cockroaches and other invertebrates (see Arrindell 2000; Bjerke and Ostdahl 2004; Kellert 1993 in previous section). Here flies and cockroaches were pests because they carried disease, acted in unfamiliar ways and because they were unpleasant to look at. In this way, as they entered the home, they

Figure 2
Advertisement illustrating the evocative language used to describe flies.
Image copyright Cyclone Industries Pty Ltd.

crossed two borders—the first a physical border between home and the immediate world outside, and the second, arguably the most important, between the home and all those spaces and ideas that it is conceptually distinguished from, such as refuse, waste, nature, and the nonhuman.

Effective fly and cockroach control necessitated an engagement with these creatures and the ways that they lived in and invaded the home. Further, it required that home be reconceptualized to reflect (and oppose) the particular physicality and activity of pests. Anti-fly and cockroach activities thus reflected the border-crossing behavior of these pests by promoting practices aimed at (re)drawing the borders between home and the outside. Both physical and chemical barriers were recommended for use against these pests (see Table 1). These border practices were supported by activities undertaken within the home and promoted both the control and elimination of flies and cockroaches.

The first recommended bordering product, the fly screen, appeared in just under 55% of fly-control adverts in 1951–5 (41% of adverts instead promoted killing flies through activity inside the home, as outlined below). These promotions recognized the window as a potential access point for flies. Fly screens offered to help the homemaker seal these spaces by creating a physical border against the fly and the disease it carried, ensuring that the home was maintained as a safe, family space (e.g. Figure 3). These products were depicted as critical in the "fight" against flies because once they were installed they acted in the absence of the human homemaker. Pest sprays targeting cockroaches replaced fly screens as the most frequently promoted bordering agents by 2001–5 (≈100%). Where fly screens provided a physical barrier to insects, pest-sprays produced *invisible* borders "around door and window frames, cracks and crevices and any other potential entry points" (Mortein, *AHB*, January 2001: 131). These flexible borders were promoted as "fillers" that compensated for fractures in home's more visible boundaries, and were increasingly seen as a means of redrawing and maintaining the border between home and the "hidden" networks of drains and sewers that supported it. Insect pests crossing this line were to meet with a sudden death, and sprays were often promoted as providing the most reliable or speedy passage to this demise (e.g. Mortein, *AH&G*, March 2002: 131). While electrical and water supply networks have been recognized as systemically creating a sense of home's autonomy (e.g. Hinchliffe 1997; Kaika 2004), fly screens and pest sprays enabled homemakers to secure a sense of security through the production of more localized borders between home and the outside. However, the prevalence of adverts highlighting the health risks of DDT-based pest-control products (particularly in 1952–5) points to the production of a new house "pest." While these chemicals

Table 1. (Re)Drawing borders against flies, cockroaches, and white ants.

	1950s	1970s	2000s
Flies:			
Chemical barriers:	Spray walls and paint windowledges/sills to kill flies that land on them		Automatically discharging insecticides
Physical barriers:	Fly screens; wipe castor oil onto screens to keep tiny flying insects out	Fly screens; insect repelling herbs hear open windows and doors	Fly screens; beaded curtains
Materials:	Remove potential breeding sites (e.g. rubbish heap); remove food sources (e.g. rubbish bin)		
Cockroaches:			
Chemical barriers:	Insecticidal powders and sprays	Sprays and baiting	Outdoor perimeter sprays
Physical barriers:			Strips of aluminum fly mesh in brickwork gaps
Materials:			Remove cockroach food sources and breeding places (e.g. cardboard boxes)
White ants:			
Chemical barriers:	Sprays (e.g. X-Termite); paint house frame with white-ant preventative product (e.g. creosote); treat soil around house	Professional sprays and fumigation products	Chemicals sprayed, injected or poured around house perimeter; termite bait system; treated softwood products (e.g. treated pine)
Physical barriers:	Construct house on blocks above ground, or on layer of river gravel—facilitates surveillance; galvanized-iron ant-caps on house bearers	Concrete slab	Concrete slab; layer of stone; metal caps on underfloor stumps; termite-proof stainless-steel mesh; keep under house dry and well ventilated
Materials:	Choose white-ant-resistant products (e.g. Cane-ite, Timbrock, Gyprock, Factotile); use wood preservatives; mud-brick houses	White-ant-resistant hardwood (e.g. red cedar, Jarrah); white-ant-resistant man-made products (e.g. Wunderflex); aluminum and steel house frames	Steel frame; remove white-ant food sources: timber under house, cardboard boxes, old newspapers; do not heap soil against house; choose hardwoods; weatherboard

Figure 3
Fly screens created a physical border against flies.
Image copyright Cyclone Industries Pty Ltd.

were designed to ensure home's safety through the elimination of disease-carrying flies, they instead were increasingly recognized as risky to human health. In this way, pest-control activity sometimes constructed home as both safe and unsafe (see Martens and Scott 2006).

A second type of fly- and cockroach-control activity focused on the enforcement of pest borders through activity undertaken *within* the home. In this way, articles and advertisements implicitly acknowledged the porosity of home and the difficulty of definitively shutting pests out of this space. One example of this activity is the use of fast-knockdown insect sprays for use against flies and cockroaches. These were particularly popular in 1951–5 when homemakers were instructed to spray every fly seen in the house. To reinforce this behavior, advertisements often sought to generate fear amongst readers by referencing the germ threat. Further, reflecting the depiction of children and babies as most vulnerable to fly contamination, many promotions linked vigilant anti-fly activity with good mothering (e.g. Figure 4). Other products and activities oriented towards the purification of home's internal spaces included fly tape (appearing 1951–5 and 1971–5, e.g. COX's DDT flycards, *AWW*, November 25 1953: 20; Shelltox pest strip, *AWW*, October 13 1971: 6), cockroach nest kill products (2001–5, e.g. Mortein nest kill, *AH&G*, January 2005: 150) and environmentally friendly methods that emphasized the deterrence and eradication of unwanted flies and cockroaches (primarily 2001–5, e.g. "You Asked We Answer," *AHB*, 2001: 18–19). House cleaning was also emphasized in each period as a necessary step in any pest-control effort. This method promoted fastidious cleaning to produce the house as a cleansed space in opposition to the dirty, unruly "outside" world.

Figure 4
Anti-fly activity was often depicted as an essential part of good mothering.
Image copyright Reckitt Benckiser (Australia).

2. The threat "within:" Dust mites

Where the previous group of pests were depicted as a threat emanating from spaces materially and conceptually "outside" the home, dust mites were represented as a threat lying steadfastly *within*. Thus while efforts against flies and cockroaches were predominantly focused on limiting access to the house, representations of dust mites highlighted the purification of internal spaces with a focus on minimization as opposed to eradication.

Magazine references to dust mites first appeared in the 2001–5 period (perhaps reflecting growing concerns about asthma in Australia), their pest status stemming from the ability of their waste and fecal matter to stimulate allergies in sensitive humans. Like flies and cockroaches, this group of pests was charged with disrupting the safety of home. However, they were also imagined as an unavoidable aspect of home. Unlike the previous pests that entered from "outside," these pests were shown to grow from human activity and nonhuman objects located *inside* the house, thriving on those materials that would otherwise bring comfort and security to people living in the house. Articles discussing dust mites thus drew attention to the dangers inherent in items like carpets, curtains, bedspreads, mattresses, pillows, and even the air (e.g. "Spring into Action," *AH&G*, October 2001: 44–9; "health@home," *AH&G*, October 2003: 188; "Beating Allergies," *BH&G*, October 2001: 182; "Asthma Attack," *BH&G*, October 2004: 137–8; "24 Hours to a Dream Bedroom," *AHB*, February 2002: 64–70, see also Horsfield 1997: 187). Like flies and cockroaches, these pests flourished in the home's otherwise unpopulated spaces, highlighting the fundamental entwinement of people, house, and pest in a way

that challenges the human–animal, human–nonhuman divisions that are prevalent in home literature. However, these creatures were also distinct from the first group of pests. Due to their size and population numbers they were depicted as an unavoidable part of home. Articles thus focused on dust-mite minimization rather than eradication, depicting home-making occurring alongside, rather than in spite of, mite presences. In this way, dust mites were constructed as an ongoing threat to the human-centered home. They represented an element of danger and disorder residing alongside people in the home, and that ruptured and emerged from ruptures in home-making activity.

Reflecting the depiction of dust mites as a threat emerging from within the house, articles and advertisements about these pests necessarily emphasized the purification of spaces and objects found inside the home. These depictions often implicitly made dust mites visible by associating them with dust. In this way, home-making efforts were frequently directed towards both "dirty" and visibly "clean" spaces. Table 2 lists some of these practices. They are typically labor intensive and repetitive in nature, demanding, for example, that homemakers regularly cleanse all of the home's soft furnishings. Additionally, dust-mite control required that homemakers consider the properties of materials selected for use in home design and furnishing. In these depictions the interactions between the dust mite and house were a product of the specific qualities of the house thing (e.g. furnishings), and the living and dietary preferences of the house pest. As Table 2 details, homemakers were thus provided with extensive advice about the selection of bedding and flooring materials. They were increasingly encouraged to conceive of these products as potential dust-mite domains where dust mites could not just live, but *thrive*. Selection of dust-mite-resistant products (e.g. synthetic pillows, waterbeds, sisal carpets, polished wood floors) appeared as a way of reducing the home's attractiveness to these pests. Contiguously, home choices could also attract and support dust-mite activity. Here the house-as-home once again appeared as a space whose design and contents supported a range of nonhumans. As Braun suggests in relation to the urban environment, this view points to a shift where home appears as "simply another ecological niche" (2005: 646). This idea is explored further in the following section, which is concerned with the impact of white ants in the home.

3. Eating the home: White ants

The final group of pests, white ants,[4] represented a distinct threat to the home and homemakers. Unlike the previous two groups, these pests did not simply disrupt home, but instead threatened to *destroy* it by consuming the house and its contents. The nature and magnitude of this threat promoted a significantly different approach

Table 2. Advice for managing dust mites in the home

	Selecting materials	Cleaning advice
Floors	• Conflicting views on the benefits of carpets vs. solid floors • Preference for "natural" fibers especially those containing tannin (e.g. sisal and coir)	• Vacuum twice weekly with "long, deliberate strokes" so that carpet pile rises • Leave house for 30 minutes after vacuuming to allow airborne dust to settle • Mop hard floors with hot water and tea-tree oil
Bedroom	• Choose mattress (e.g. Latex mattress, waterbeds) and mattress protector that are resistant to dust mites • Pillows with synthetic fillings	• Change mattresses and pillows every 10 years • Vacuum mattresses weekly on low suction • Wash blankets, etc. at least every 6 weeks • Wash all bed linen and covers weekly in soapy water >55°C, or wash with cool water then tumble dry • Add eucalyptus oil or tea-tree oil to water when washing sheets • Regularly air bed linen in the sun • Flood bedroom with natural light
Furnishings		• Vacuum upholstery twice weekly • Have upholstery professionally cleaned • Dust with moist cloth
General	• Vacuum cleaner with a "collar" and filters to prevent dust escaping • Washing machine that guarantees dust-mite removal • Use an air filter in every room	

Table compiled from: "Spring into Action: 21 Tips for Making Your Home Allergy-free and Spring Clean!" *AH&G*, October 2001: 44–9; "Design News," *AH&G*, April 2002: 23–8; "Wake up to Great Beds," *AH&G*, October 2003: 66–72; "Health@Home," *AH&G*, October 2003: 188; "H&G Hotline," *AH&G*, August 2004: 217; "Eco-smart houses: Homes That Are Good for the Environment and Your Family," *AH&G*, February 2005: 92; "24 Hours to a Dream Bedroom," *AHB*, February 2002: 64–70; "Hello Sleepyhead," *AHB*, July 2004: 64–9; "Laundry Love," *AHB*, July 2004: 161–6; "Carpet Is Back," *BH&G*, April 2001: 108–9; "Beating Allergies," *BH&G*, October 2001: 182; "What's Afoot? Your Complete Flooring Guide," *BH&G*, August 2002: 42–7; "Allergy Ease: Planning for a Sneeze-free Home," *BH&G*, September 2002: 126; "Asthma Attack," *BH&G*, October 2004: 137–8; "Back to Bases," *BH&G*, May 2005: 42).

to pest control. Where advice oriented toward the first two groups of pests focused on regulation and elimination, articles discussing white ants encouraged surveillance of white-ant presences in and around the house-as-home. Further, pest-control activity typically prioritized the preemptive scripting out of white ants through appropriate material selection and the construction of impermeable borders. In 1951–5 white-ants references appeared predominantly in advertisements. However, articles about home-building and new building materials were also significant at this time, reflecting the lack of traditional building materials available in the postwar period as well as a trend towards owner-building. Articles concerned with DIY home inspections, which appeared predominantly in 2001–5, also typically contained references to these organisms.

White ants were identified as a home threat in each period examined (although received little discussion in 1971–5). They were seen as pests due to their threat to consume the structures of the house, a relation which recent articles depicted as a battle or war with the homeowner pitted against hordes of invading insects apparently intent on destroying the home. In one article, white ants were described as "home-wreckers" that "love taking up residence [in the home] and munch[ing] away on soft timbers" ("Home Advice: Who Ya Gonna Call?" *AH&G*, October 2001: 217). While in another, homeowners were encouraged to "defend" their property against the "white menace" ("Home Maintenance," *AH&G*, August 2003: 142). Advice about management of these pests varied across the periods examined. Where articles and advertisements in the earliest period focused on products aimed at limiting white-ant attack (e.g. Cane-ite, *AHB*, 1951: 16; Gyprock, *AH&G*, September 1953: 62; "Floor Construction," *AHB*, June 1955: 41), the most recent magazines provided advice about constructing borders against whiteants, and identifying white-ant presence.

In each period, as recommended for flies and cockroaches, white-ant-control methods emphasized the use of physical and chemical borders to deter or prevent white-ant attack. However, where fly and cockroach barriers were typically mobilized after the completion of the house, white ants were ideally preemptively scripted out of the home through aspects of house design. Home-builders were advised to use capping, or place houses on blocks, stilts or concrete slabs to facilitate surveillance of white-ant activity, as well as using chemical barrier systems to deter and destroy white ants (e.g. "Question Box," *AHB*, April 1953: 68–70); "Advice Please!" *AH&G*, April 1954: 4; "Save Money in a BIG Way," *AH&G*, December 1954: 110; "Floor Construction," *AHB*, June 1955: 41; "Building News," *AHB*, July 1955: 77; "You're Well on the Way when You Reach Floor Framing/Wall Framing," *AH&G*, August 1955: 46; "Go with the Grain," *AH&G*, February 2005: 126–32; "Home Advice," *AH&G*, October 2001: 217–20). Like the fly screens and

sprays used to seal the home against flies and cockroaches, these bordering systems were depicted as a means of separating the house from external dangers. In a recent promotion, pest-control company Bayer utilized this metaphor, promising a treated zone that "protects your home like a moat around a castle and stops future termite invaders" (*AHB*, April 2001: 132).

Articles appearing in the most recent magazines (2001–5) detailed the specific impact that white ants have on house structures—hollowing timber, leaving pinholes in woodwork, bubbling paintwork, leaving piles of dust on floors, and damp areas in walls (see in particular: "Home Advice," *AH&G*, October 2001: 217; "Home Maintenance," *AH&G*, August 2003: 142). Here homemakers were to "read" the home for white-ant presences by training their ears to hear the faint "tapping and clicking" noises made by these pests, and by training their eyes to identify tiny holes in woodwork, piles of dust on the floor, and any other white-ant markings. These activities supported the surveillance of white ants and relate to the representation of white-ant activity as a war. In this depiction the safety of the house-as-home could only be achieved through regular and thorough house inspections by the property owner, backed up by regular visits by professional pest exterminators. These relations point to a shift in both the house and homemaker. First, the house structure is altered by creatures consuming its woodwork, and second, people are changed as their perceptions are shifted and broadened through their efforts to read white-ant "writing" in and around the home (see Hinchliffe *et al.* 2005 for discussion). This process encourages a view of the house as a potentially lively space inhabited in diverse ways that go beyond those intentioned in its design, and in this way promotes a shift in the ways that people engage with and imagine the house (this point is addressed in the concluding section below).

White-ant-control activities also required homemakers to consider the properties of materials used in home construction. As noted in relation to dust mites, the interactions occurring here between the white ant and house frame were a product of the specific qualities of the house thing and the practices and preferences of the house pest. A wide variety of white-ant-resistant products were thus promoted, their success stemming from the fact that they were inedible to white ants. Advertisements in 1951–5 extolled the benefits of "man-made" products, which were promoted as attractive and easy to assemble (see recurring adverts for Cane-ite, Gyprock, Timbrock, and Facto-tile in *AH&G, AHB*, 1951–5). Steel house-frames and "natural" hardwood products were offered as alternatives to termite-attractive timbers in later periods (e.g. "Houses of Metal . . . Have They a Future?" *AHB*, March 1972: 73–7; "NU-STEEL Homes," *AH&G*, February 2001: 168; "Timber from Abroad," *AH&G*, February 1972: 60; "Warming to Wood," *AH&G*, January 2004: 122–6). As

observed in the interactions between dust mites and the home's soft furnishings, these products contributed specific qualities to the house-as-home. Reflecting this theme one Australian furniture builder promoted the qualities of Jarrah, suggesting that "one of the best features as far as building goes is that [...] white ants, have to be really hard up before they will eat it. This timber has peculiar properties that seem to make them pass it over for tastier trunks" ("Handsome Jarrah," *AH&G*, June 1974: 98).

CONCLUSIONS

An initial analysis of pest depictions in homemaker magazines finds pests represented as organisms that challenge home's provision of a safe and secure environment for human home-dwellers. As Figure 1 outlined, "pest" emerged as a relational achievement referencing aspects of nonhuman animal activity and appearance, alongside the cultures and experiences of people. Further, pest status was strongly influenced by the location of human–animal encounters, in this case intersecting with popular notions of home as a safe, secure space. Flies and cockroaches thus became pests as they introduced dirt and disease, and, perhaps most troublingly, highlighted home's connection to the "outside" (spaces of nature, waste, and disorder). Similarly, dust mites were depicted as pests because they threatened the health of the home's human residents, while white ants were pests because they threatened the structural stability of the house. In the magazines, animals became pests as they disrupted people's experience of home. However, further analysis suggested that pests do not simply challenge and threaten home, but also become part of the home and shape human experiences of the space. In this way despite the frequent evocation of border narratives (which depict the house as an inappropriate abode for pests) the analysis of magazine content points to a broader and more dynamic understanding of home that acknowledges the multiple and fractured ways that the house-as-home is lived. Through their interactions with the house structures and furnishings pests highlight the necessarily more-than-human experience of home-making, and in this way point to a more active and less human-centered view of home than has traditionally been pursued.

First, home attracted, supported, and was shaped by a diversity of life forms. Here spaces that were uninhabitable from a human perspective appeared as lively zones that supported the life activity of diverse nonhumans through the provision of food and housing. For cockroaches and flies, for instance, gaps around drains, holes in brickwork, and open windows become alternate points of entry, and various waste sites and products shift status to become potential sources of food. Although built for people, houses also catered to the needs of insect pests and were altered by the everyday habits

and activity of these organisms. These spaces were not empty, sterile caverns for human existence but instead, as Hinchliffe and Whatmore (2006: 124) have argued in relation to cities, homes were depicted as potentially lively, populated zones "inhabited with and against the grain of expert designs." As an advertising strategy, this view promotes diligent pest-control activity, yet this understanding also functions to challenge humanist views of home as a space produced and inhabited only by people. Pest-control practices necessarily engaged with and recognized pests' alternate modes of access and ways of living, and so challenge us to reconceptualize home's borders to reflect the specific physicality and activity of these mobile creatures. This view resonates with Smith's experience of "becoming animal" (2003: 188). However, in this view, the apparent de-domestication of home by pests does not result from the philosophical decentering of human influence within the home. Instead, in the magazines, "becoming animal" appeared as an uncomfortable, unwanted, disturbing outcome of nonhuman agency that is (or should be) challenged and rejected by human inhabitants.

Second, analysis of the magazine content pointed to the active materiality of the house. Here the materials structuring and furnishing the home are seen to bring distinct qualities and characteristics to the house-as-home, some encouraging and some inhibiting pest presences. This view was particularly evident in advertisements and articles concerned with white ants and dust mites. These depictions represent a significant decentering of human influence in the home because although house materials are chosen by people (including home-dwellers, designers, builders, etc.), each product introduced into the house was shown to bring different potential relations with pests and people. Some products engendered a further threat to home. DDT-based chemical products, for example, represented a threat to the health of home's human residents and became a new type of home pest. Further, pest restriction and control required humans to enroll a range of chemical and physical agents, including sprays, screens, and baiting systems. These products purported to extend human efforts to limit pest access through time and space, acting in the absence of an overt human presence. In this view humans were not the only agents determining house structure and home experience. Instead, people were just one component of an imbrication of house structure and "other" creatures that lived, fed, and reproduced within the house-as-home.

Drawn together these views point to the house as a more mobile, active, and multi-layered space that homemakers, invoking an amalgam of chemical and physical agents, were attempting to hold still. These observations highlight the complexities inherent in the magazines' depictions of pests. For while on one level pest-control practices sought to regulate and "hold" the house in place,

they *also* drew attention to the house as a much less controllable, much less human-centered place. And in this sense they begin to point to the challenges and perhaps the impossibility of efforts to produce home as a purified human space.

ACKNOWLEDGMENTS

My thanks go to Robyn Dowling and Sandra Suchet-Pearson for their guidance in the preparation of this article, and to the anonymous referees whose insights have improved the article.

NOTES

1. Some editions were missing within the collection. Over the three time period's fourteen editions of *AH&G*, two editions of *AWW*, and three editions of *BH&G* were missing and not readily accessible elsewhere.
2. *AWW* has consistently been one of Australia's top-ranking magazines since the 1950s. It is currently the best-selling magazine in the "Major Women's Monthly and Food Categories," as well as the best-selling magazine across all categories. *AH&G* and *AHB* were the key homemaker magazines in the 1950s. In 2006 *BH&G* was the top-selling magazine in the homemaker category, *AH&G* was second ranking, and *AHB* fifth ranking (Greig 1995; Magazine Publishers of Australia 2007; Pacific Magazines 2007; Sheridan 2002).
3. Advertisements were typically repeated a number of times throughout the given periods. As such the analysis refers only to one example of each.
4. These organisms are properly called termites. However, I use the term white ant as it was the most common term used in magazine articles and advertising when describing these organisms in each time period.

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